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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,375	10/25/2000	Stein A. Lundby	PA000452	3689

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Qualcomm Incorporated  
Patents Department  
5775 Morehouse Drive  
San Diego, CA 92121-1714

EXAMINER
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ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/697,375

Applicant(s)

LUNDBY ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-17 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-3, 8, 18, 19, 21, 22 and 27 is/are rejected.
- 7) ☒ Claim(s) 4-7, 9-12, 20 and 23-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the first set of channels" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 14-17 are objected as being dependent upon rejected claim 13.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-3, 8, 18-19, 21, 22, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson (US 6,434,380) in view of Wong (US 2003/0002490).

Regarding claims 1, 8, 18, 21, 22, and 27, Andersson teaches a method and apparatus for a wireless communication system (fig. 1) operative for transmission of packet data (fig. 1 box 32) and low delay data (fig. 1 box 28) on a plurality of transmission channels.

The system comprises a first set of channels within the plurality of transmission channels, the first set of channels being assigned to packet data transmissions and packet data being transmitted in frames (fig. 1 box 32).

The system comprises a second set of channels within the plurality of transmission channels, the second set of channels being assigned to low delay data transmissions (fig. 1 box 28).

Although Andersson teaches signaling information (col. 3 lines 53-58), the inventor is silent on a signaling channel within the plurality of transmission channels, the signaling channel being assigned to message transmissions, wherein each message identifies a packet data target recipient, as specified in claims 1, 8, 18, 21, 22, and 27; and the message identifies a parameter of the packet; as specified in claims 18, 21, 22, and 27; encoding/decoding in claims 21 and 22.

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Wong teaches, in a HDR environment, a signaling channel within the plurality of transmission channels, the signaling channel being assigned to message transmissions, wherein each message identifies a packet data target recipient (data rate control channel, pg. 8 [0073]), as specified in claims 1, 8, 18, 21, 22, and 27; and the message identifies a parameter of the packet (data rate, pg. 8 [0073]); as specified in claims 18, 21, and 22. In order to estimate the relative power of the mobile, it is obvious that the message on the mobile identify the mobile. The examiner associates the packet data target recipient of the applicant with the mobile of Wong. Regarding the limitation encoding/decoding in claims 21 and 22, encoding/decoding is simply the particular format used to send the data rate information from the mobile to the base station.

Therefore it would have been obvious to one of ordinary skill in the art, having both Andersson and Wong before him/her and with the teachings [a] as shown by Andersson, a method and apparatus for a wireless communication system operative for transmission of packet data and low delay data on a plurality of transmission channels, and [b] as shown by Wong, in a HDR environment, a signaling channel within the plurality of transmission channels, the signaling channel being assigned to message transmissions, wherein each message identifies a packet

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data target recipient, to be motivated to modify the system of Andersson by incorporating a data rate control channel.

Implementing a separate reverse link channel for data rate control can perform this modification. This would improve the system by providing a means for estimating relative transmission powers as well as controlling the data rates of the mobiles.

Regarding claim 27, in addition to the limitations listed above, a memory and processor (Andersson: fig. 2 box 24, 22).

Regarding claim 2, a first message is transmitting on the signaling channel concurrently with an associated packet data frame, and wherein the first message identifies a first packet data recipient associated with the first packet data frame (signaling information, col. 3 lines 55-58).

Regarding claim 3, the first message identifies a subset of the first set of channels assigned to transmission of the first data packet. Note, a subset can include one member. The identification of one member has previously been addressed.

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Regarding claim 19, the message is sent on the reverse link from the mobile to the base station. This limitation has already been mentioned with respect to the data rate control channel.

***Allowable Subject Matter***

5. Claims 13-17 and 26 are allowed.

6. Claims 4-7, 9-12, 20, and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 4 and 9, nothing in the prior art of the record teaches or fairly suggests the first message identifies a coding scheme, in combination with the other limitations listed in the claim.

Regarding claim 5, although the combination of Andersson and Wong teaches a buffer, processor, and decoder for processing packet data and signaling data (Andersson: fig. 1 box 24, 22), the system does not teach ignoring data packets if the wireless apparatus is not the target recipient.

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Regarding claim 6, nothing in the prior art of the record teaches or fairly suggests the target recipient information identifying multiple recipients, in combination with the other limitations listed in the claim.

Regarding claim 13, nothing in the prior art of the record teaches or fairly suggests data rate determination based upon coding information, in a system comprising packet data channels, low delay data channels, and a signaling channel. Noting applicant's spec, pg. 12 lines 11-12, the data rate is proportional to the number of codes available. In contrast, Cheng (US 6,189,122) teaches the number of Walsh code channels is adjustable to provide a dynamic data rate (col. 6 lines 58-63).

Regarding claim 20, the message is sent on the forward link from the base station to the mobile. In contrast, Wong teaches the message being sent on the reverse link from the mobile to the base station.

Regarding claims 23-25, the parameter is a sequence number, comprises coding and modulation information, is a first identifier, wherein the first identifier is stored in a memory



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storage device corresponding to the coding and modulation, Wong only teaches the parameter corresponds to data rate.

Regarding claim 26, the combination of Andersson and Wong does not teach a processor for determining coding information in a system comprising packet data channels, low delay data channels, and a signaling channel.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-3, 8, 18-19, 21, 22, and 27 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned

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are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.



Ronald Abelson  
Examiner  
Art Unit 2666

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October 17, 2003



DANG TON  
PRIMARY EXAMINER